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Vesa Lehtovirta

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EXAMINER

IQBAL, KHAWAR

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/778,960	Applicant(s) LEHTOVIRTA ET AL.	
	Examiner KHAWAR IQBAL	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08-05-08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 14-18, 20-38, 40-45 and 52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 14-18, 20-38, 40-45 and 52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2-26-09 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-10, 14-18, 20-38, 40-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gomez (6178327) in view of Tamura et al (20070298804).

Regarding claim 1 Gomez teaches for use in communication system where connections are established between an external network and users of mobile radio subscriber units by way of a radio access network and each established connection is handled by an associated data processing circuit, a method comprising:

detecting a failure in a data processing circuit indicating that the data processing circuit is not functioning and thus can no longer handle established connections (Note: since, the Base Station is broadcasting a fault detection message (sending a message

to the mobile station) indicating the existence of the fault condition and failure detected circuits includes fault in a telephone interconnect Circuit, fault in a dispatch circuit, packet data circuit and circuit data circuit between the base station and the communications servers, it is clear that the system is detecting a failure in a data processing circuit indicating that the data processing circuit is not functioning. As a result, the faulty circuit can no longer handle established connections, col. 4, lines 41-65 and col. 5, lines 10-25);

identifying one or more established mobile radio subscriber unit connections being handled by the failed data processing circuit and sending a message identifying the one or more identified mobile radio subscriber unit connections (Note; since, base station sends which communication services being affected by fault condition and mobile stations are receiving alert about the detected faulty condition of communications links [i.e., mobile radio subscriber unit connections].)(col. 4, lines 1-20, 41-67);

wherein each mobile radio user connection is active and ongoing, is associated with one or more radio access bearers, and carries information between the mobile radio subscriber unit user and another communicating entity coupled to the external network (col. 5, lines 15-24). Gomez does not explicitly state wherein the radio access network node is used to establish one or more radio access bearers associated with the one or more mobile radio subscriber unit connections.

In an analogous art, Tamura et al teaches wherein the radio access network node is used to establish one or more radio access bearers associated with the one or

more mobile radio subscriber unit connections (para. # 2539, 2573, 2588-2595).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Gomez teaches by specifically adding features the radio access network node is used to establish one or more radio access bearers associated with the one or more mobile radio subscriber unit connections, so as to identify authorized mobile stations in order to enhance to provides mobile communication system can be built which is suited for establishing various kinds of data bearer, thereby being adapted to multimedia communication taught by Tamura et al.

Regarding claim 15 Gomez teaches for use in communication system where connections are established between an external network and users of radio subscriber units by way of a radio access network and each established connection is controlled by an associated data processing device, a method comprising:

detecting a failure in a data processor device in a node where the failed data processing device is no longer functional and thus can no longer control any established connections (col. 4, lines 41-50, see claim 1), and

sending a message identifying the failed data processing device to one or more other nodes, wherein the one or more other nodes release radio subscriber unit connections associated with the identified failed data processing device (col. 4, lines 41-67),

wherein each mobile radio user connection is active and ongoing, is associated with one or more radio access bearers, and carries information between the mobile radio subscriber unit user and another communicating entity coupled to the external network (col. 5, lines 15-24). Gomez does not explicitly state wherein the radio access

network node is used to establish one or more radio access bearers associated with the one or more mobile radio subscriber unit connections.

In an analogous art, Tamura et al teaches wherein the radio access network node is used to establish one or more radio access bearers associated with the one or more mobile radio subscriber unit connections (para. # 2539, 2573, 2588-2595).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Gomez teaches by specifically adding features the radio access network node is used to establish one or more radio access bearers associated with the one or more mobile radio subscriber unit connections, so as to identify authorized mobile stations in order to enhance to provides mobile communication system can be built which is suited for establishing various kinds of data bearer, thereby being adapted to multimedia communication taught by Tamura et al.

Regarding claim 21 Gomez teaches for use in radio communications system providing communications between an external network and radio units, a radio access network that establishes connections between the external network and users of the radio units, comprising:

a radio network control node for communicating with the external network; and a radio base station node coupled to the radio network controller configured to provide a radio interface with plural radio units, wherein at least one of the nodes includes multiple data processing devices, where each established connection is controlled by an associated data processing device, and when a failure is detected in one of the data processing devices such that the failed data processing device is no longer functional

and thus can no longer control any established connections, the one node is configured to send a message to another of the nodes identifying one or more active and ongoing radio unit connections affected by the failure (col. 4, lines 41-67, see claim 1),

wherein each connection is active and ongoing, is associated with one or more radio access bearers, and carries information between the radio unit user and another communicating entity coupled to the external network (col. 5, lines 15-24). Gomez does not explicitly state wherein the radio access network node is used to establish one or more radio access bearers associated with the one or more mobile radio subscriber unit connections.

In an analogous art, Tamura et al teaches wherein the radio access network node is used to establish one or more radio access bearers associated with the one or more mobile radio subscriber unit connections (para. # 2539, 2573, 2588-2595). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Gomez teaches by specifically adding features the radio access network node is used to establish one or more radio access bearers associated with the one or more mobile radio subscriber unit connections, so as to identify authorized mobile stations in order to enhance to provides mobile communication system can be built which is suited for establishing various kinds of data bearer, thereby being adapted to multimedia communication taught by Tamura et al.

Regarding claim 34 Gomez teaches for use in providing communication connections between an external network and a user of a mobile subscriber unit, a network node communicating with one or more network nodes, comprising:

multiple data processing devices for controlling established connections, a controller configured to perform the following tasks: detect a failure in the one of the data processing devices such that the failed data processing device is no longer functional and thus can no longer control any established connections; determine one or more active and ongoing mobile subscriber unit connections affected by the detected failure; and send a message to one or more other network nodes identifying the one or more affected mobile subscriber unit connections (col. 4, lines 41-67, see claim 1),

wherein each mobile subscriber unit connection is active and ongoing, is associated with one or more radio access bearers, and carries information between the mobile subscriber unit user and another communication entity coupled to the external network (col. 5, lines 15-24). Gomez does not explicitly state wherein the radio access network node is used to establish one or more radio access bearers associated with the one or more mobile radio subscriber unit connections.

In an analogous art, Tamura et al teaches wherein the radio access network node is used to establish one or more radio access bearers associated with the one or more mobile radio subscriber unit connections (para. # 2539, 2573, 2588-2595).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Gomez teaches by specifically adding features the radio access network node is used to establish one or more radio access bearers associated with the one or more mobile radio subscriber unit connections, so as to identify authorized mobile stations in order to enhance to provides mobile

communication system can be built which is suited for establishing various kinds of data bearer, thereby being adapted to multimedia communication taught by Tamura et al.

Regarding claim 43 Gomez teaches for use in a communication system where connections are established between an external network and users of radio subscriber units by way of a radio access network and each established connection is handled by one of multiple data processing circuits in a radio access node, apparatus comprising:

means for determining one or more active and ongoing radio subscriber unit connections affected by a failure detected in one of the data processing circuits indicating that the data processing circuit is not functioning and thus can no longer handle established connections, and means for sending a message identifying the one or more affected established radio subscriber unit connections that can no longer be handled by the failed data processing device (col. 4, lines 41-67, see claim 1),

wherein each established radio subscriber unit connection is active and ongoing, is associated with one or more radio access bearers, and carries information between the radio subscriber unit user and another communicating entity coupled to the external network (col. 5, lines 15-24). Gomez does not explicitly state wherein the radio access network node is used to establish one or more radio access bearers associated with the one or more mobile radio subscriber unit connections.

In an analogous art, Tamura et al teaches wherein the radio access network node is used to establish one or more radio access bearers associated with the one or more mobile radio subscriber unit connections (para. # 2539, 2573, 2588-2595).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the device of Gomez teaches by specifically adding features the radio access network node is used to establish one or more radio access bearers associated with the one or more mobile radio subscriber unit connections, so as to identify authorized mobile stations in order to enhance to provides mobile communication system can be built which is suited for establishing various kinds of data bearer, thereby being adapted to multimedia communication taught by Tamura et al.

Regarding claims 2,22,35,44 Gomez teaches releasing the one or more affected mobile radio subscriber unit connections identified in the message (col. 4, lines 41-67).

Regarding claims 3,23,36,45 Gomez teaches maintaining one or more mobile radio subscriber connections not determined to be affected by the detected failure (col. 4, lines 51-67, see claim 1).

Regarding claims 4, 24, 36 Gomez teaches maintaining a signaling connection associated with a mobile radio subscriber unit affected by the detected failure (col. 4, lines 41-67).

Regarding claims 5,16,25,37 Gomez teaches wherein the mobile radio subscriber unit uses plural connections during a communications session (col. 3, line 60-col. 4, line 10, col. 4, lines 41-67).

Regarding claims 6, 19, 26 Gomez teaches generating a list identifying the one or more mobile radio subscriber units affected by the detected failure and one or more subscriber unit connections affected by the detected failure, and wherein the message includes the list (col. 3, line 60-col. 4, line 10, col. 4, lines 41-67, see claim 1).

Regarding claims 7,20,27,38 Gomez teaches generating a list identifying the one or more mobile radio subscriber units affected by the detected failure without identifying radio subscriber unit connections, and releasing all mobile radio subscriber unit connections associated with the one or more subscriber units in the list (col. 2, lines 38-64, col. 3, line 60-col. 4, line 10, col. 4, lines 41-67, see claim 1).

Regarding claims 8,18,28,39 Gomez teaches indicating in the list whether a signaling connection associated with a mobile radio subscriber unit affected by the detected failure should be released or maintained (col. 2, lines 38-64, col. 3, line 60-col. 4, line 10, col. 4, lines 41-67).

Regarding claims 9,17,29,40 Gomez teaches wherein the list includes identifiers for the one or more mobile radio subscriber units affected by the detected failure and for the one or more subscriber unit connections affected by the detected failure (col. 2, lines 38-64, col. 3, line 60-col. 4, line 10, col. 4, lines 41-67).

Regarding claims 10,30,41 Gomez teaches wherein when the list does not include connection identifiers, all connections for a mobile radio subscriber unit are released (col. 2, lines 38-64, col. 3, line 60-col. 4, line 10, col. 4, lines 41-67).

Regarding claims 11,31,42 Gomez teaches wherein the message is sent to one or more other nodes (col. 2, lines 38-64, col. 3, line 60-col. 4, line 10, col. 4, lines 41-67).

Regarding claims 12, 32 Gomez teaches wherein the node is one of an external network node, a core network node, an access network node, and a mobile radio subscriber unit (fig. 1).

Regarding claims 14, 33 Gomez teaches wherein the message is a control signaling message (col. 2, lines 38-64, col. 3, line 60-col. 4, line 10, col. 4, lines 41-67).

Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gomez (6178327) and Tamura et al (20070298804) further in view of Ramaswamy (6643512).

Regarding claim 52 Gomez teaches the MSC may connect the mobile station to another mobile station, or to a public switched telephone network (PSTN) 124.

Likewise, a MDG provides packet data connectivity to a wide area packet network (WAPN) 126, such as the internet. A DAP provides high speed, intra-system, half-duplex, one to one, or one to many voice connectivity. Gomez does not specifically teach a radio network controller and the core network node is an SGSN.

In an analogous art, Ramaswamy teaches a radio network controller and the core network node is an SGSN (col. 1, lines 20-30, fig. 1-2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Gomez by specifically adding feature a radio network controller and the core network node is an SGSN in order to enhance system performance to Communication failure between mobile station (MS) (12) and radio network controllers (RNC) (10a, 10b) which control radio coverage in radio access network areas (1a, 1b) is detected. A request is transmitted from RNC to core network (20) and preventing malicious user causing dropped connection as taught by Ramaswamy.

Response to Arguments

4. Applicant's arguments with respect to claims 1-10, 14-18, 20-38, 40-45 and 52 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAWAR IQBAL whose telephone number is (571)272-7909. The examiner can normally be reached on 9 am to 6.30 pm Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GEORGE ENG can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

/K. I./
Examiner, Art Unit 2617